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Peter W. Estelle

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08/03/2009

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EXAMINER

ROST, ANDREW J

ART UNIT

PAPER NUMBER

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ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETER W. ESTELLE

Appeal 2008-005594
Application 09/702,493
Technology Center 3700

Decided:¹ July 30, 2009

Before WILLIAM F. PATE, III, JOHN C. KERINS, and MICHAEL W.
O'NEILL, *Administrative Patent Judges*.

O'NEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF THE CASE

Peter W. Estelle (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1-4, 16, 19, and 21-23. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

THE INVENTION

The invention is to an improved driver circuit of an electrically operated fluid dispensing gun, which can dispense a variety of fluids, such as adhesives, flux, and grease. The speed at which the dispensing gun operates can be increased by using a higher voltage power supply. Simply plugging in a higher voltage without other changes, however, can result in overheating the driver circuit of the dispensing gun. Replacement of the driver circuit is costly. Accordingly, the claimed invention is directed to a driver circuit that automatically provides an efficient operation of the dispensing gun by sending a signal having an initial peak current with a variation in duration in time, followed by a hold current.

The claim limitations in dispute between the Examiner and the Appellant are reproduced below.

For Claim 1

a driver circuit ... providing an output signal ...
having an initial peak current with a variable
duration followed by a hold current, the duration
of said initial peak current varying as a function of
the output voltage of said power supply.

For Claim 16

producing an output signal having an initial
peak current with a variable duration followed
by a hold current, the duration of the initial

peak current varying as a function of the
voltage of the power supply.

THE REJECTION

The following Examiner's rejection is before us for review:

Claims 1-4, 16, 19, and 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nojima (U.S. Patent Number 5,812,355, issued on Sep. 22, 1998) in view of Ohtsuka (U.S. Patent Number 5,737,172, issued on Apr. 7, 1998).

ISSUE

The Appellant contends that the Examiner erred in rejecting the claims because the combination of Nojima and Ohtsuka does not meet the claim limitation of producing a driver circuit output signal having a variable duration initial peak current followed by a hold current. Appellant agrees with the Examiner that Nojima teaches an electric gun driver where the pull-in or peak current is selectable by the operator and does not change with changes in line voltage. Appellant disagrees, however, with the Examiner's characterization of the teachings of Ohtsuka. App. Br. 7.

The Examiner found that Nojima discloses a majority of the claimed limitations except for the details of the initial peak current of the driver circuit having a variable duration determined as a function of the output voltage of the power supply. The Examiner posited that Ohtsuka discloses a similar driver circuit with initial peak and holding currents, with the pulse width for a voltage value decreasing in response to the power supply voltage. Based on the Examiner's interpretation of Ohtsuka's teachings, the

Examiner concluded that a person having ordinary skill in the art would find it obvious to have an initial peak current of variable duration. Ans. 3-4.

The issue before us is:

Whether Ohtsuka's peak current of duration T_1 as shown in sign (f) of Figure 6 is variable.

FINDINGS OF FACT

We find that the following enumerated findings of fact are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Ohtsuka Figure 6 is a timing chart showing the relation between an opening or closing operation of the electromagnetic contactor. Col. 6, ll. 37-40.
2. The sign (e) in Figure 6 shows a duration of T_1 . As shown in Figure 6, the length of duration T_1 is not varied.
3. The sign (f) in Figure 6 indicates a timing chart for change of a current in the operational coil. Col. 15, ll. 2-3. As shown in Figure 6, the current for duration T_1 is greater than the current after T_1 .

PRINCIPLES OF LAW

Appellants have the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary

indicia of nonobviousness.”) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

ANALYSIS

After review of the Examiner’s Answer and the Appellant’s Brief, we conclude that the Appellant has demonstrated error in the Examiner’s position. Nothing in Ohtsuka teaches or suggests the output signal shown in sign (f) having an initial peak current with a variable duration followed by a hold current. *See* Facts 1-3. In other words, nothing in Ohtsuka teaches or suggests that the duration T_1 of the closing current shown in sign (f) changes or could change. The Appellant’s analysis of Ohtsuka cogently reaches this conclusion. *See* App. Br. 9-16.

CONCLUSIONS

The Appellant has demonstrated that the Examiner erred in determining that Ohtsuka teaches or suggests a peak current of variable duration.

DECISION

The Examiner’s decision to reject the claims is reversed.

REVERSED

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